

**REMARKS**

In accordance with the foregoing, claims 1, 13, 17, 28, 29, and 32 are amended for form without narrowing the claims within the meaning of *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 56 USPQ2d 1865 (Fed. Cir. 2000). No new matter is being presented, and approval and entry are respectfully requested. Claims 1-32 are pending.

**ITEM 12: ALLOWABLE SUBJECT MATTER**

Claims 5-12, 15, 16, 20-27, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if suitably rewritten to independent form. (Action at page 14).

Applicant appreciates the indications of allowable subject matter. However, claims 5-12, 15, 16, 20-27, 30 and 31 have not been rewritten to independent form, since patentability is submitted to reside in the respective independent and intervening claims, from which claims 5-12, 15, 16, 20-27, 30 and 31 depend.

**ITEM 3: REJECTION OF CLAIMS 1-2 UNDER 35 US §102(e) AS BEING ANTICIPATED BY KAJIYAMA ET AL. (U.S.P. 6,552,990).**

The Examiner rejects independent claim 1 and dependent claim 2 under 35 USC §102(e) as being anticipated by Kajiyama. (Action at pages 3-5).

Claim 1 recites an apparatus for recording and/or reproducing data on and/or from various types of optical disks including "a diffraction grating splitting the first and the second laser beams into a main ray and sub rays according to movement of the diffraction grating between a first position and a second position along an optical axis; and a photo-detector having a first detecting portion for receiving the main ray of the first laser beam at a first location based on the first position of the diffraction grating and a second detecting portion, which is positioned at a different location based on the second position of the diffraction grating, for receiving the main ray of the second laser beam." (Emphasis added).

Applicant submits that these features are not taught by Kajiyama as the Examiner contends. The Examiner contends that these features are taught by Kajiyama in FIG. 2, which illustrates photodetector 1 and first and second detecting portions 1a, 1b. (Action at page 4).

However, Kajiyama teaches (col. 9, starting at line 1):

(r)eferring to FIG. 4, semiconductor laser 1 includes, in addition to laser chips 1a and 1b, a base 1c to which these laser chips 1a and 1b are mounted, and a package 1d for accommodating laser chips 1a and 1b and base 1c . . . chips 1a and 1b are mounted such that their emittance openings PA and PB are arranged on an imaginary line between notches k2 and k3. Semiconductor laser 1 is positioned such that the spots which are formed by laser beams from laser chips 1a and 1b on signal recording surface 9a or 99a are symmetrically arranged on either

side of the track.

That is, Kajiyama does not teach the claimed basing according to movement of the diffraction grating between a first position and a second position along an optical axis.

### **Conclusion**

Since features recited by independent claim 1 (and dependent claim 2) are not taught by Kajiyama, the rejection should be withdrawn and claims 1-2 be allowed.

### **ITEMS 4-8: REJECTION OF INDEPENDENT CLAIMS 3, 13, 14, 28, AND 29 (AND RESPECTIVE DEPENDENT CLAIMS 4 AND 14, 18, 19) UNDER 35 USC §102(e) AS BEING ANTICIPATED BY ABE ET AL. (U.S.P. 6,084,843)**

The Examiner rejects independent claims 3, 13, 14, 28, and 29 (and respective dependent claims 4 and 14, 18, 19) under 35 U.S.C. §102(e) as being anticipated by Abe. (Action at pages 5-8).

Independent claims 3, 13, 14, 28, and 29 recite, respectively, a compatible disk player and a method, using claim 3 as an example, including "a diffraction grating selectively splitting the first and the second laser beams into three rays depending on which optical disk is to be accessed, wherein the three rays comprise a main ray and two sub-rays; and a photo-detector selectively receiving the three rays of the first laser beam and the three rays of the second laser beam at different detecting portions for data recording and/or reproduction and error detection and compensation, wherein the detecting portions comprise a central detecting portion and two peripheral detecting portions."

The Examiner contends that these features are taught by Abe citing FIGs. 3, 6, 7, 11 and cols 4, lines 50-58).

Applicant submits that Abe does not teach these features in the cited FIGs. or the relied upon portion of the corresponding disclosure.

Rather, Abe teaches in FIG. 3 (see, for example, col. 4, lines 55-58) "concept of the diffraction efficiency attainable by the HOE 101 in FIG. 1 when irradiated with an incident light." Abe merely teaches in FIG. 6 (see, for example, col. 3, lines 5-1):

HOE 117 allows almost all the laser light having a wavelength of 650 nm to pass through it. Namely, a zero-order diffracted light goes out of the HOE 117. This laser light is focused by the refractive objective lens 118 onto a data recording layer of the DVD 104 having a 0.6 mm-thick substrate. Since the refractive objective lens 118 is optimized for no spherical aberration to occur when the laser light is incident upon the DVD 104, a light spot having been collimated to the limit of diffraction will be focused on the DVD 104.

Abe, further, merely teaches regarding FIG. 7 (see, for example, col. 3, lines 26-32):

annular zone pitch of the HOE 117 is designed optimum to correct a spherical aberration caused by a difference in substrate thickness between the DVD 104

and CD 103 when a first-order diffracted light of 780 nm in wavelength and the refractive objective lens 118 are used in combination, as shown in FIG. 7

Thus, Abe does not teach a diffraction grating selectively splitting the first and the second laser beams into three rays depending on which optical disk is to be accessed.

### **Conclusion**

Since features recited by independent claims 3, 13, 14, 28, and 29 (and respective dependent claims 4 and 14, 18, 19) are not taught by the cited art, the rejection should be withdrawn and claims 3-4, 13-14, 18-19, and 28-29 be allowed).

### **ITEMS 9-10: REJECTION OF CLAIMS 17 AND 32 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER KAJIYAMA IN VIEW OF NODA ET AL. (U.S.P. 5,153,863)**

Independent claims 17 and 32 recite a compatible disk player and a method for a compatible optical disk player for recording and/or reproducing data, using claim 32 as an example, including "a laser beam source comprising a first laser diode and a second laser diode, wherein the first laser diode emits a first laser beam of a first wavelength for recording and/or reproducing data on/from a first optical disk comprising a first recording density, and the second laser diode emits a second laser beam of a second wavelength for recording and/or reproducing the data on/from a second optical disk comprising a second recording density; a diffraction grating selectively splitting the first and the second laser beams into a main ray and two sub-rays depending on which optical disk is to be accessed, wherein the diffraction grating is movable between a first position and a second position in the direction of the optical axis based upon which optical disk is to be accessed; a beam splitter selectively reflecting the first laser beam toward the first optical disk and the second laser beam toward the second optical disk; an annular cover lens selectively adjusting a size of the first laser beam on the first optical disk and the second laser beam on the second optical disk; an objective lens selectively focusing the first laser beam on a recording surface of the first optical disk and the second laser beam on a recording surface of the second optical disk."

### ***Prima Facie* Obviousness Not Established**

#### **Features Not Taught By Cited Art**

As provided in MPEP §2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F. 2d 1981, (CCPA 1974).

Applicant submits that none of the cited art, alone or in combination, teaches recited features of at least "a diffraction grating is movable between a first position and a second position in the direction of the optical axis based upon which optical disk is to be accessed" as the Examiner contends." Rather, Kajiyama merely teaches (col. 9, starting at line 5):

(s)emiconductor laser 1 is positioned such that the spots which are formed by

laser beams from laser chips 1a and 1b on signal recording surface 9a or 99a are symmetrically arranged on either side of the track.

**No Motivation or Reasonable Chance of Success to Combine the Art**

Further, the Action concedes that Kajiyama does not teach features recited by claims 17 and 32 including "a photo-detector comprising a central detecting portion and two peripheral detecting portions, wherein the photo-detector selectively receives the main ray of the first laser beam on the central detecting portion to determine a focus error and to record and/or reproduce the data on/from the first optical disk and receives the sub-rays of the first laser beam on the peripheral detecting portions to determine a tracking error, and the main ray of the second laser beam on the peripheral detecting portions to record and/or reproduce the data on/from the second optical disk and receives one of the two sub-rays on the central detecting portion to determine the focus error and the tracking error on the second optical disk." (Action at pages 11-12).

Nevertheless, the Examiner contends the features are taught by Noda and there is motivation to modify Kajiyama since:

to receive all components of light rays in either first or second beams by Kajiyama's optical pickup, it would have been obvious . . . to replace Kajiyama's photodetector elements with photodetector elements such as Noda's, because Noda's photodetector arrangement uses a standardized electronic circuit to obtains recorded signals with its servo components at the same time.

(Action at page 13).

In item 1, entitled Response to Remarks the Examiner contends that "the lay out of the photodetector device depends on a chosen arithmetic operation so that detected signals can be extracted." (Action at page 2).

As provided in MPEP §2144. 04:

The mere fact that a worker in the art could rearrange the parts of the reference device . . . is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation . . . without the benefit of appellant's specification, to make the necessary changes in the reference device.

Applicant submits there is no showing of an incentive or motivation to modify Kajiyama with the teachings of Noda, as the Examiner contends. Kajiyama does not teach a motivation to use a "standardized electronic circuit" but rather (see, for example, col. 15, lines 52-55):

to avoid such chromatic aberration, preferably laser chip 1a is placed at a first focal length F1 from the collimator lens such that laser beam 25 with the wavelength of 635nm is transmitted through.

**CONCLUSION**

Since features recited by claims 17 and 32 are not taught by the cited art, alone or in

combination, and there is no motivation to combine the art, and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 17 and 32 allowed.

**CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

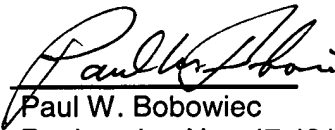
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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